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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,334	12/28/2000	Jonathan M. Zweig	003239 .P072	7667
8791	7590	11/15/2004	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			ELALLAM, AHMED	
		ART UNIT	PAPER NUMBER	
			2662	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/751,334	ZWEIG ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	AHMED ELALLAM	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 28 June 2004.

2a) This action is FINAL.                                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 17-46 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 17-46 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/16/01 & 5/06/03.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

This office action is responsive to election made on June 28, 2004

### ***Claim Objections***

1. Claims 29 and 38 are objected to because of the following informalities:

In claim 29, the phrase "said one or more associated wireless unit" lacks antecedent basis. Appropriate correction is required.

In claim 38, the phrase "the predetermined time" lacks antecedent basis.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 17-24 and 29-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi, U.S. Patent No (6,256,334).

Regarding claim 17, with reference to figure 3, Adachi discloses a method in a wireless network system, the wireless system comprising a cable network 4 (claimed backbone), base station 1 (claimed access point), and plurality of wireless terminal stations 2 (claimed one or more associated wireless unit data coupled to the access point by way of a wireless transmission medium), the method comprising adding RTS/CTS frame to a synchronization frame to be notified to the terminal station 2, see column 15, lines 33-44. (Claimed enabling request to send (RTS) and clear to send (CTS) data transmission in said one or more wireless units, comprising transmitting a message to said one or more wireless unit having a first control data that causes said one or more wireless units to implement RTS/CTS in transmitting data packets to said access point).

Regarding claim 18, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit*, because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 19, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed message further includes a second control data that causes said one or

more wireless units to implement fragmentation threshold in transmitting data to the access point (base station)).

Regarding claim 20, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed specified fragmentation threshold).

Regarding claim 21, with reference to figures 1 and 3, Adashi discloses a radio base station 1 (claimed access point) having an RTS/CTS-addition-and-packet-length-setting Section 68 in combination with SYNCH Frame transmission section 51 that transmit a synchronization message having RTS/CTS frame to a plurality of terminal stations (figure 3, units 2), see column 15, lines 33-44. Examiner interpreted the combination of the units 68 and 51 as being the claimed logic circuit. (Claimed an access point having a logic circuit to transmit a message to one or more associated wireless unit, the message includes a first control data that causes one or more associated wireless units to implement RTC/CTS in transmitting data packets to the access point).

Regarding claim 22, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit*, because only the

terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 23, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed message further includes a second control data that causes said one or more wireless units to implement fragmentation threshold in transmitting data to the access point (base station)).

Regarding claim 24, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed specified fragmentation threshold).

Regarding claim 29, with reference to figure 2, Adachi discloses a wireless terminal stations 2, comprising:

a plurality of sections 72-78 to communicate with a radio base station 1 (figure 3); (claimed a wireless transceiver to communicate with an access point via a wireless transmission medium);

a SYNCH FRAME RECEPTION SECTION 70, (claimed logic circuit) to receive synchronization frame having an RTS/CTS frame. See column 15, lines 33-44. (Claimed logic circuit to receive a message from said access point by way of the wireless transceiver, wherein the message includes a first control data that causes the

wireless unit to use request to send (RTS) and clear to send (CTS) in transmission of the data to the access point).

Regarding claim 30, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit* , because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 31, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed message further includes a second control data that causes said one or more wireless units to implement fragmentation threshold in transmitting data to the access point (base station)).

Regarding claim 32, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed specified fragmentation threshold).

Regarding claim 33, with reference to figure 2, Adachi discloses a wireless terminal stations 2, comprising:

a plurality of sections 72-78 to communicate with a radio base station 1 (figure3); (claimed a wireless transceiver adapted for communication with an access point); a SYNCH FRAME RECEPTION SECTION 70, in combination with respective RTS and CTS TRANSMISSION/RECEPTION SECTIONS 75 AND 76 (claimed logic circuit) to (inter alias) receive synchronization frame having an RTS/CTS frame for the radio base station 1. See column 15, lines 33-44. (Claimed logic circuit to receive a message from said access point by way of the wireless transceiver, wherein the message includes a first control data that causes the wireless unit to use request to send (RTS) and clear to send (CTS) in transmission of the data to the access point).

Regarding claim 34, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit* , because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 35, Adashi discloses transmitting an RTS frame prior to transmitting data; see column 11, lines 62-67 and column 12, lines 1-6. (Claimed said RTS/CTS transmissions include a transmission of RTS packet prior to sending a data packet to the access point).

Regarding claim 36, Adashi discloses receiving a CTS frame in response to the transmitted RTS frame. See column 12, lines 7-17. (Claimed RTS/CTS transmissions

further include receipt of a CTS packet from the access point in response to prior transmission of the RTS packet).

Regarding claim 37, with reference to figure 11, Adashi shows that data is transmitted after a CRT frame is received within a predetermined time interval from the transmission of the RTS frame, see also column 22, lines 63-67. (Claimed logic circuit further transmits the data packet if the CTS packet is received within a predetermined time interval from the transmission of RTS packet).

Regarding claim 38, it is part of the RTS/CTS protocol that to transmit a second RTS frame if the CTS frame is not received within a predetermined time interval from the transmission of the RTS frame. See Frame formats of Request to send and Clear to sent, as defined in ISO/IEC 8802.11, pages 41-42 of the IDS document filed May 6, 2003, the standard shows a duration in which the transmitting side expect a response, it is clear if a response is not received within the specified duration, another "second" RTS frame is transmitted.

Regarding claims 39 and 40, Adashi further discloses adding a maximum packet length to the synchronization frame, for implementing fragmentation by the wireless unit, (Examiner interpreted the maximum packet length as being the claimed specified fragmentation threshold). See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49.

Regarding claim 41, with reference to figures 1 and 3, Adashi discloses a radio base station 1 (claimed access point) having an RTS/CTS-addition-and-packet-length-setting Section 68 in combination with SYNCH Frame transmission section 51 that

transmit a synchronization message having RTS/CTS frame to a plurality of terminal stations (figure3, units 2), see column 15, lines 33-44 and column 23, lines 27-34 and figure 10 steps 48 and 49. Examiner interpreted the combination of the units 68 and 51 as being the claimed logic circuit. In addition Adashi discloses that the synchronization frame comprises a maximum packet length to be used in fragmenting data for transmission (Claimed an access point having a logic circuit to transmit a message to one or more associated wireless unit, the message includes a first control data that causes one or more associated wireless units to implement a fragmentation threshold in transmitting data packets to the access point and a second control data that causes said one or more wireless unit to use request to send (RTS) and clear to send (CTS) in transmission of data to the access point).

Regarding claim 42, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit*, because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 43, (Examiner interpreted the maximum packet length indicated in claim 41 above as being the claimed message further includes a specified fragmentation threshold to be specified by said one or more wireless unit).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25-28, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi, U.S. Patent No (6,256,334).

Regarding claim 25 and 44, with reference to figures 3 and 4, Adashi discloses an MPU (Microprocessor Unit) 21 that controls each of the constituent elements attached to it over the bus 29 and manages the terminal station 2 under control of the radio base station 1. See column 10, lines 15-19. Adashi further discloses that the radio base station 1 having an RTS/CTS-addition-and-packet-length-setting Section 68 in combination with SYNCH Frame transmission section 51 that transmit a synchronization message having RTS/CTS frame to a plurality of terminal stations (figure3, units 2), see column 15, lines 33-44. Examiner interpreted the combination of the units 68 and 51 as being the claimed logic circuit. Adashi does not explicitly disclose a software routine to control the elements of the base station.

However, it would have been obvious to an ordinary skill in the art to load control software in the MPU of Adashi so that the Adashi's system would be upgradeable. The advantage would be the ability to add other features to the system of Adashi as the wireless LAN technology evolves (i.e. RTS/CTS in combination with QoS).

Regarding claim 26, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit* , because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 27, Adashi discloses the use of RTS/CTS frame is notified to each terminal station 2 by way of the synchronization frame signal. See column 23, lines 29-34. (Examiner interpreted the notification of each terminal station by way of the synchronization frame, as being the claimed *message comprises a multicast data packet intended for said one or more associated wireless unit* , because only the terminal stations that are within the base station cell that would be able to receive the synchronization frame, and that reads on the multicasting feature).

Regarding claims 28 and 45-46, Adashi further discloses adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the maximum packet length as being the claimed message further includes a second control data that causes said one or more wireless units to implement fragmentation threshold in transmitting data to the access point (base station), as in claim 45 and the fragmentation threshold is specified as in claim 46).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: MacKay et al, US 5844905 A; Whitehill et al, US 6404756 B1; Ramanathan, US 6577613 B1; Gfeller et al, US 6643469 B1; Myojo et al, US 2002/0037014 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
November 12, 2004

  
JOHN DEZZLO  
PRIM. EXAMINER